

AMENDMENTS TO THE CLAIMS

Listing Of Claims

1. (original) A system for fabricating a semiconductor component on a substrate comprising:

a plate comprising at least one cavity configured to mold a body segment of the component on the substrate and having at least one corner;

an inlet runner on the plate configured to direct a molding compound into the cavity;

a corner runner on the plate configured to direct the molding compound through the corner; and

a vent on the plate in flow communication with the cavity.

2. (original) The system of claim 1 wherein the corner includes orthogonal surfaces and the corner runner is configured to direction the molding compound generally parallel to one surface and generally perpendicular to another surface.

3. (original) The system of claim 1 wherein the substrate comprises a leadframe and the component comprises a semiconductor package.

4. (original) The system of claim 1 further comprising a second plate having a second cavity configured to mold a second body segment on an opposing surface of the substrate, a second inlet runner, a second corner runner and a second vent.

5. (original) The system of claim 1 wherein the plate comprises a plurality of cavities having a plurality of

corners configured to mold a plurality of body segments for a plurality of components on the substrate, and a plurality of corner runners configured to direct the molding compound through the corners.

6. (original) The system of claim 1 further comprising a transfer molding apparatus configured to press the plate against the substrate and to inject the molding compound into the inlet runner.

7. (original) The system of claim 1 further comprising a dummy cavity on the plate configured to mold a dummy segment on the substrate, the dummy cavity in flow communication with the cavity and the air vent.

8. (original) A system for fabricating semiconductor components on a substrate comprising:

a plate comprising a plurality of mold cavities configured to mold body segments for the components on the substrate, the cavities having a plurality of corners;

an inlet runner on the plate configured to direct a molding compound into the cavities;

a corner runner on the plate configured to direct the molding compound through the corners and to prevent air in the molding compound from accumulating in the corners; and

a vent on the plate in flow communication with the cavities.

9. (original) The system of claim 8 further comprising a second plate configured for mating engagement with the plate, the second plate comprising a plurality of second mold cavities configured to mold second body segments on an opposing surface of the substrate and having a plurality of second corners, and a second corner runner configured to direct the molding compound through the second corners.

10. (original) The system of claim 8 wherein each corner comprises orthogonal surfaces and the corner runner is configured to direct the molding compound in a direction generally parallel to one of surface and generally perpendicular to another surface.

11. (original) The system of claim 8 wherein the components comprise semiconductor packages comprising a plurality of dice and the body segments encapsulate the dice.

12. (original) The system of claim 8 wherein the substrate comprises a leadframe and the components comprise semiconductor packages.

13. (original) The system of claim 8 further comprising a transfer molding apparatus configured to press the plate against the substrate and to inject the molding compound into the inlet runner.

14. (original) The system of claim 8 further comprising a mold compound source in flow communication with the inlet runner.

15. (original) The system of claim 8 further comprising a dummy cavity in flow communication with the cavities and the single vent configured to mold a dummy segment on the surface of the substrate.

16. (original) A system for fabricating semiconductor components on a substrate comprising:

a plate comprising a plurality of mold cavities configured to mold body segments for the components on the substrate;

a first runner on the plate configured to direct a molding compound into the cavities;

a second runner on the plate configured to direct the molding compound through the cavities and to prevent air in the molding compound from accumulating in the cavities;

a dummy cavity in flow communication with the first runner and the second runner configured to receive the air; and

a vent on the plate in flow communication with the dummy cavity.

17. (original) The system of claim 16 further comprising a second plate substantially identical to the plate configured to mold second body segments for the components on an opposing surface of the substrate.

18. (original) The system of claim 16 further comprising a connecting runner between the cavities and a second dummy cavity in flow communication with the connecting runner configured to mold a second dummy segment on the substrate.

19. (original) The system of claim 16 wherein the plurality of mold cavities comprises a pair of cavities.

20. (original) A system for fabricating semiconductor components on a substrate comprising:

a plate comprising a first cavity configured to mold a first component on the substrate and a second cavity configured to mold a second component on the substrate;

an inlet runner on the plate configured to direct a molding compound into the first cavity;

a first corner runner on the plate configured to direct the molding compound through a first corner of the first cavity;

a connecting runner on the plate configured to direct the molding compound from the first cavity to the second cavity;

a second corner runner on the plate in flow communication with the connecting runner configured to direct the molding compound through a second corner of the second cavity;

a dummy cavity in flow communication with the second cavity and the second corner runner; and

a vent on the plate in flow communication with the dummy cavity.

21. (original) The system of claim 20 wherein the substrate comprises a leadframe and the components comprise semiconductor packages.

22. (original) The system of claim 20 wherein the substrate comprises a leadframe and the components comprise thin small outline packages.

23. (original) A system for fabricating semiconductor components on a substrate comprising:

a plate comprising at least one pair of cavities configured to receive a molding compound and to mold body segments of the components on a surface of the substrate, the cavities having a plurality of corners;

a plurality of corner runners on the plate configured to direct the molding compound through the corners and to prevent air from accumulating in the corners; and

a vent on the plate in flow communication with the cavities and the corner runners.

24. (original) The system of claim 23 further comprising a dummy cavity on the plate in flow communication with the cavities the corner runners and the vent, configured to mold a dummy segment on the substrate.

25. (original) The system of claim 23 further comprising a second plate substantially identical to the plate configured to mold the body segments on an opposing surface of the substrate.

Claims 26-50 (canceled)